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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,084	08/26/2003	Srinivas Kandala	SLA1324	2760

7590 05/14/2007  
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EXAMINER
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CHURNET, DARGAYE H

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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05/14/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/648,084	<b>Applicant(s)</b> KANDALA, SRINIVAS	
	<b>Examiner</b> Dargaye H. Churnet	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/27/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **Detailed Action**

### ***Abstract Objections***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it reads like a claim. Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

2. Claims 4, 7, 8, 10, 14-17, and 21 are objected to under 37 C.F.R 1.75 because of the following formalities:

In claim 4, line 2, the second occurrence of "an acknowledgement" seems to refer back to "an acknowledgement" previously recited. If this is true, it is suggested to change the second occurrence of "an acknowledgement" to ---the acknowledgement---. There is a similar objection in line 4. Claims 17, line 2, and claim 21, lines 2 and 4 are objected for similar reasons.

In claim 7, line 1, the second occurrence of "frames" seems to refer back to "frames" previously recited. If this is true, it is suggested to change the second

Art Unit: 2616

occurrence of "frames" to ---the frames---. Claim 14, line 1 is objected for similar reasons.

In claim 7, line 2, the second occurrence of "a schedule" seems to refer back to "a schedule" previously recited. If this is true, it is suggested to change the second occurrence of "a schedule" to ---the schedule---. Claim 14, line 2 is objected for similar reasons.

In claim 8, lines 1-2, the second occurrence of "a first frame" seems to refer back to "a first frame" previously recited. If this is true, it is suggested to change the second occurrence of "a first frame" to ---the first frame---. Claim 16 line 1 is objected for similar reasons.

In claim 8, line 2, the second occurrence of "an AP" seems to refer back to "an AP" previously recited. If this is true, it is suggested to change the second occurrence of "an AP" to ---the AP ---.

In claim 8, line 2, the second occurrence of "a QSTA" seems to refer back to "a QSTA" previously recited. If this is true, it is suggested to change the second occurrence of "a QSTA" to ---the QSTA---.

In claim 10, line 2, the second occurrence of "a retransmitted frame" seems to refer back to "a retransmitted frame" previously recited. If this is true, it is suggested to change the second occurrence of "a retransmitted frame" to ---the retransmitted frame---.

In claim 15, lines 1-2, the second occurrence of "a power-saving mode" seems to refer back to "a power-saving mode" previously recited. If this is true, it

Art Unit: 2616

is suggested to change the second occurrence of "a power-saving mode" to ---  
the power-saving mode---.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-8, 10-16, 19-25, and 28-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 2, line 4, the term "the transmission queue" has no antecedent basis. Claims 10, 19, and 28 are rejected for similar reasons.

In claim 8, line 2, the term "the More Data subfield" has no antecedent basis. In line 3, the term "the Frame Control field" has no antecedent basis. Claims 16, 25, and 35 are rejected for similar reasons.

Claims 3-7, 11-15, 20-24, and 29-34 are rejected as being dependent on rejected independent claims.

Claims 1-36 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: timing the next minimum service interval in response to receiving the ACK for the

Art Unit: 2616

retransmitted first frame, as shown in Fig. 5. Claims 1, 9, 18, 26, 27, and 36 are rejected for this reason.

Claims 2-8, 10-17, 19-25, and 28-35 are rejected as being dependent on rejected independent claims.

### ***Claim Rejections - 35 USC § 103***

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2616

Claims 1, 9, 17, 18, 26, 27, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Sherman (cited 6,831,912 B1).

For claim 1, the admitted prior art discloses in the prior art of Fig. 1, transmitting a first frame from an access point (AP) to a quality of service station (QSTA) and timing the next minimum service interval. the admitted prior art discloses all the subject matter of the claimed invention with the exception of receiving an acknowledgement from the QSTA and, in response to receiving the acknowledgement, retransmitting the first frame from the AP to the QSTA. Sherman from the same or similar fields of endeavor teaches receiving an acknowledgement from the QSTA and, in response to receiving the acknowledgement, retransmitting the first frame from the AP to the QSTA (see Fig. 2, blocks 84, 86, and 88, wherein a datagram message is transmitted from server to client, an acknowledgement is sent from the client to server, and the server resends the datagram message including missing packets specified in the acknowledgement). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to incorporate the elements above stated by Sherman in the network of the admitted prior art. The method taught by Sherman is modified/implemented into the network of the admitted prior art by retransmitting a message upon the receipt of an acknowledgement. The motivation for receiving an acknowledgement from the QSTA and, in response to receiving the acknowledgement, retransmitting the first frame from the AP to the QSTA is to assure all information is transmitted from source to destination.

Art Unit: 2616

Claim 9 is rejected for similar reasons. Claims 18, 26, 27, and 36 are rejected as obvious devices to perform the method already rejected.

For claim 17, the admitted prior art discloses all the subject matter of the claimed invention with the exception of following the sending of an acknowledgement to the AP, remaining enabled to receive subsequent transmissions. Sherman from the same or similar fields of endeavor teaches following the sending of an acknowledgement to the AP, remaining enabled to receive subsequent transmissions (see Fig. 2, blocks 86 and 88, wherein after the acknowledgement is sent from the client, the client is able to receive the retransmission of the datagram message). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to incorporate the elements above stated by Sherman in the network of the admitted prior art. The method taught by Sherman is modified/implemented into the network of the admitted prior art by remaining enabled after sending an acknowledgement. The motivation for following the sending of an acknowledgement to the AP, remaining enabled to receive subsequent transmissions is to be able to receive the retransmission of the first frame.



***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These references include Chen et al. (cited 2002/0164976 A1) and Chapman (cited 6,438,123 B1).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dargaye H. Churnet whose telephone number is 571-270-1417. The examiner can normally be reached on Monday-Friday from 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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